

## BORAL MATERIAL TECHNOLOGIES INC.

## Material Safety Data Sheet This document has been prepared to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200.



A Boral Industries Inc. Company

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Classification: CCP

IDENTITY (As used on label and list) **BOTTOM ASH. LWA. LITE SAND** 

Note: Blank spaces are not permitted. If any item is not applicable, or no information is

available, the space must be marked to indicate that.

Section I - Identity Information	
Chemical Name	Emergency Telephone Number
Bottom Ash	1 (800) 424-9300 (CHEMTREC)
Chemical Family	Telephone Number for Information
Coal Ash	(210) 349-4069
Date Prepared 15-Feb-93	Date Revised 07-Jan-98

Section II - Hazardous Ingredients			Other Limits
lazardous Component (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Recommended
Silica, Amorphous (SiO2) CAS# 7631-86-9.	~2.58 mg/m³	10 mg/m³	NIOSH: 6 mg/m³
Silica, Crystalline (SiO2) CAS# 7631-86-9.	~1.56 mg/m³	0.1 mg/m³	0.05 mg/m³
Alumina, Respirable (Al2O3) CAS#1344-28-1.	5 mg/m³	5 mg/m³	NA
Calcium Oxide (CaO) CAS# 1305-78-8.	5 mg/m³	2 mg/m³	NA
Titanium Dioxide, Respirable (TiO2) CAS# 13463-67-7.	15 mg/m³	5 mg/m³	NA
Ferric Oxide (Fe2O3) CAS# 1309-37-1.	10 mg/m³	5 mg/m³	NA
Magnesium Oxide (MgO) CAS# 1309-48-4.	15 mg/m³	10 mg/m³	NA

<sup>1.</sup> Composition is variable depending on coal source and power plant characteristics. 2. This product does not have a significant respirable particle size distribution. However, various material handling operations may produce dust with respirable particles. 3. Materials present at >0.5% and <12% and not listed in OSHA or ACGIH include Potassium Oxide and Carbon.

Section III - Physical/Che	mical Characteristics		Ţ
Boiling Point (°F) NA	Specific Gravity (H2O=1) NA	NFPA 0 = Minimum hazard 1 = Slight hazard 2 = Moderate hazard	
Vapor P <b>ressure (mm Hg.)</b> NA	Percent Volatile by Volume (%) NA		Special Symbols OX = Oxidizer
Vapor Density (AIR=1) NA	Evaporation Rate (Butyl Acetate=1) NA	blua Special vellow	ACID = Acid ALK = Alkali COR = Corrosive
Solubility in Water NA	pH NA		₩= Use no water Radioactive

Appearance and Odor

Grayish white or black sand or aggregate material, odorless.

NA NA Extinguishing Media NA Special Fire Fighting Procedures NA Unusual Fire and Explosion Hazards	Section IV - Fire and Explosion H	Flammable Limits: LEL	UEL	
NA Special Fire Fighting Procedures NA	NA	NA	NA	
pecial Fire Fighting Procedures NA	xtinguishing Media			
pecial Fire Fighting Procedures  NA	* * * *			
Inusual Fire and Explosion Hazards	NA			
Unusual Fire and Explosion Hazards	•			
Jnusual Fire and Explosion Hazards				
	Inusual Fire and Explosion Hazards			

Section V - Reactivity D	ala		
Stability Unstable Stable	Conditions to Avoid	NA	
Incompatibilty (Materials to Avoid)	NA		
Hazardous Decomposition or Bypro	oducts NA		
Hazardous May Occur Polymerization Will Not Occur	Conditions to Avoid	NA	
Section VI - Health Haza	rd Data	erita en	*
Route(s) of Entry:	Inhalation?✓	Skin? <mark>:</mark> ✓	Ingestion?☑
Health Hazards (Acute and Chronic) Acute: Irritation of the eyes Chronic: Fibrotic disease of	s, skin and mucous mem	obranes. carcinogencity.	
Carcinogenicity: NA	NTP?	IARC Monographs?	OSHA Regulated?
Signs and Symptoms of Exposure NA			
Medical Conditions Generally Aggra Persons with history of resp disorders may experience a	iratory illness and reduc	eed pulmonary function should avoid wo	ork areas with high dust levels. Persons with skin
warm and at rest. See a Pt Inhalation: Remove from de	er for at least 15 minutes E VOMITING. Dilute by nysician. usty area to fresh air.		ysician. ything by mouth to unconscious person. Keep victim
Section VII - Precaution Steps to Be Taken in Case Material I	S (U SKI (A (K) (U)))	iy ano use	
	I. Dampen with a water	mist to control dust (airborne dust) befiing transport.	fore removal. Do not use compressed air. If loaded
Waste Disposal Method	and the state of t		
	al ash disposal pond. ol	bserve local, state and federal regulation	ons. This material is not a RCRA hazardous waste.
Precautions to Be Taken in Handling Avoid creating dust.	g and Storing		
skin and mucus membranes and	d chronic exposure could lea areas affected should be tho infile. Call 210-349-4069 and	es, san and mucus memoranes. Excessive of the lungs. This production of the lungs are attention of the lungs attention of the lungs.	er mist to control airborne dust and use appropriate personal exposure to these materials may cause irritation of the eyes, ct contains silica, which has been identified as a potential n is advised in case of ingestion, inhalation or eye contact. A
Respiratory Protection (Specify Type	SENIORS .		
	None required under	PEL. If PEL is exceeded, use MSHA/	NIOSH TC-21C-XXX respirators.
Type of Ventilation Local Exhau Mechanical (Genera	NV Other	ecial or Oher specify: Jse local exhaust during transfer to sta work places as needed.	y below PEL. Use mechanical ventilation for Indoor
Protective Gloves Work gloves as needed			
Eye Protection Recommend Safety goggle Other Protective Clothing or Equipm		e wash stations should be readily acces	ssible.
As needed.	nont		
Work/Hyglenic Practices Use good hyglene practices	s and observe above pre	ecautions.	